

LEIGH-ON-SEA URBAN DISTRICT COUNCIL.

PUBLIC HEALTH COMMITTEE.

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Medical Officer—

W. DOUGLAS WATSON, M.R.C.S., L.R.C.P.

Surveyor—

J. W. LIVERSEDGE.

Sanitary Inspector—

A. SIDWELL.



FRANCIS AND SONS, PRINTERS, 55, HIGH STREET, SOUTHEND-ON-SEA.



REPORT.

GENTLEMEN,

I have the honour to submit to you my Eleventh Annual Report on the health of the town of Leigh-on-Sea.

Population.

I estimate the population in the middle of 1907 to be 6,035.

Births.

During the year there were registered 143 births, 83 male, 60 female, the birth rate per 1,000 being 23.7.

Deaths.

Fifty-three deaths were registered in Leigh last year, the death rate per 1,000 population being 8.74. Three deaths occurred during the year in the Infirmary at Rochford of persons belonging to Leigh; adding these, the corrected death rate for the year was 9.27, which is the lowest death rate recorded in Leigh.

Infantile Mortality.

Thirteen deaths occurred of infants under one year, the rate per 1,000 births registered being 90.9.

Infectious Cases.

Only ten notifications were received during the year under the Infectious Diseases Notification Act. The figures for the past ten years were :—

1907	...	...	10
1906	...	...	26
1905	...	...	15
1904	...	...	9
1903	...	...	16
1902	...	...	117
1901	...	...	62
1900	...	...	87
1899	...	...	140
1898	...	...	61

No death occurred from any of these diseases.

Diphtheria.

Three cases were notified, two in one house presumably caused by the proximity of a foul ditch. This was cleansed, no further cases occurring in the vicinity.

Scarlet Fever

Five cases of scarlet fever were notified, mostly of a mild type. One case was through secondary infection. All were isolated in their own homes.

Enteric Fever.

During eleven months of the year no notification of typhoid fever was received. In December two cases were notified, in neither of which could any definite cause of infection be found. The following table gives the number of cases notified in previous years with mortality :—

In 1906 there were 8 cases with no fatality

„ 1905	„	6	„	1	„
„ 1904	„	6	„	1	„
„ 1903	„	13	„	2	„
„ 1902	„	43	„	4	„
„ 1901	„	15	„	4	„
„ 1900	„	33	„	7	„
„ 1899	„	38	„	6	„
„ 1898	„	21	„	4	„
„ 1897	„	17	„	4	„

It will be seen that the table shows a satisfactory diminution in the incidence of this disease.

Deaths from Zymotic Diseases.

Small Pox	...	...	—
Measles	...	...	—
Scarlet Fever...	...	...	—
Diphtheria	...	...	—
Whooping Cough	...	...	—
Fever	...	...	—
Diarrhoea	...	...	3
			—
		3	—

The death rate per 1,000 persons living being .49.

TABLE I.—**Vital Statistics**
of Whole District during 1907 and previous Years of
Leigh-on-Sea.

Year.	Population estimated to Middle of each Year.	BIRTHS.		Total Deaths Registered in the District.			
		Number.	Rate.	Under 1 year of Age.		At all Ages.	
				Number.	Rate per 1000 Births registered	Number.	Rate.
1897	3525	87	24·6	7	80·4	52	14·7
1898	3750	102	27·2	15	147·0	56	14·9
1899	4000	101	25·2	14	138·6	41	10·25
1900	4100	104	25·38	9	86·5	55	13·4
1901	3667	107	29·18	6	56·1	42	11·42
1902	3767	93	24·7	10	107·4	60	15·9
1903	4064	111	24·85	7	63·06	40	9·84
1904	4773	126	25·12	18	150	67	14·03
1905	5083	110	21·6	5	45·45	53	10·4
1906	5354	116	21·66	14	120·6	58	10·81
Averages for years 1897-1906.	4248·3	105	24·8	10·5	99·5	52·4	12·56
1907	6035	143	23·7	13	90·9	53	8·74

Deaths of Residents registered in Public Institutions beyond the District 3

Deaths at all Ages belonging to the District 56—9·27

AREA 2,332 acres, 2 roods, 20 poles.

POPULATION 3,667 } At
Number of Inhabited Houses 797 } Census
Average number of Persons per house... ... 4·6 } of 1901.

UNION WORKHOUSE, outside the District at Rochford.

INSTITUTION, outside the District, receiving sick and infirm persons from the District, Rochford Infirmary.

TABLE III.—**Cases of Infectious Diseases**
notified during the Year, 1907.

NOTIFIABLE DISEASES.	Cases Notified in Whole District. At Ages—Years.						
	All Ages.	Under 1	1—5	5—15.	15—25.	25—65.	65 and upwards
Diphtheria (including Mem- branous Croup	3	...	...	3	...	...	...
Scarlet Fever ... ...	...	...	3	1	1	...	...
Enteric Fever	2	...	...	1	...	1	...
Totals	10	...	3	5	1	1	...

TABLE IV.—**Causes of, and Ages at Death**
during the Year, 1907.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents," whether occurring in or beyond the District.						
	All Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up- wards
Diarrhoea	1	4	...	...	...	...	...
Enteritis	1	...	...	...	...	...	1
Phthisis, (Pulmonary) Tuber- culosis)	7	...	...	...	2	4	1
Other tubercular diseases ...	1	...	1	...	...	...	...
Cancer, malignant disease ...	5	...	...	...	...	3	2
Bronchitis	8	2	...	...	...	...	6
Pneumonia	1	...	...	...	...	...	1
Other diseases of Respiratory organs	2	1	...	1	...	...	...
Alcoholism {	1	...	...	...	...	1	...
Cirrhosis of liver ...	2	2	...	...	...	...	...
Premature birth ...	2	...	...	...	...	...	...
Heart diseases ...	2	...	...	...	...	...	2
Accidents	4	1	...	...	1	1	1
Suicides	1	...	...	...	...	1	...
Old age	6	...	...	...	...	...	6
Apopplexy	3	...	...	...	...	2	1
Kidney disease	2	...	...	...	...	2	...
Appendicitis	1	...	...	...	...	1	...
Uncertified	1	...	...	...	1	...	...
All other causes	4	3	...	...	...	1	...
All causes	56	13	1	1	4	16	21

TABLE V.—Infantile Mortality during the Year 1907.

CAUSE OF DEATH.	Total under One Month								Total under One Month				Total death under One Year.			
	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under One Month	1—2 months	2—3 months	3—4 months	4—5 months	5—6 months	6—7 months	7—8 months	8—9 months	9—10 months	10—11 months	11—12 months
All Causes.—Certified.	1	1	...	...	2	1	1	2	1	2	1	2	1	1	...	13
Diarrhoea, all forms	1	...	1	..	...	...	1	...	3
Enteritis...	1	...	...	...	...	...	1
Premature birth	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	2
Meningitis	1	...	...	...	1	...	...	...	2
Convulsions	1	...	...	...	...	...	...	...	1
Bronchitis	1	1	...	...	...	...	2
Pneumonia	1	...	...	...	1
Suffocation, overlying	1	...	...	...	...	...	...	...	...	...	...	...	...	1
	1	1	...	...	...	2	1	1	2	1	2	1	2	1	...	13

Population (estimated to middle of 1907) 6035.

Births in the year—Legitimate 135.

, , Illegitimate 8

" " Illegitimate Infants 1

Deaths from all Causes at all Ages 53

Deaths in the year of Legitimate Infants 12

Illegitimate Infants 1

Phthisis.

Seven deaths occurred last year from this disease.

The number of deaths from this disease is increasing, and is due to the number of invalids who come here hoping to benefit by the healthy surroundings. In my opinion, although there are drawbacks to the compulsory notification of this disease, some form of notification is advisable in towns like Leigh which attract invalids often unfortunately in an advanced stage of the disease.

Isolation of Infectious Diseases

During the past year a site was selected for the erection of a Hospital for infectious cases, and negotiations for the purchase of the same are in progress.

The Factory and Workshops Act, 1901.

The factories and workshops in Leigh have been inspected during the year.

H.M. Inspector notified two matters to the Sanitary Authority. Notices were served, and the matters remedied.

Removal of House Refuse.

This work is carried out under contract. Complaints have been few, and have received satisfactory attention.

Dairies, Cowsheds and Milkshops.

These have been inspected during the year, and have been found generally satisfactory, although there are some reforms which are deemed necessary, and to ensure which further regulations have been drafted.

The Water Supply.

During the year the Council's Waterworks were sold to the Southend Water Company, who promoted a Bill in Parliament for the purpose.

Your Council are to be congratulated on the satisfactory conclusion of the negotiations for the sale.

The Council's works were opened in 1897, water being found at a depth of 640 feet, the supply being estimated at 8,000 gallons per hour. The capacity of the reservoir was 50,000 gallons. Two oil engines of 25 h.p. were used for pumping. The supply decreased so that in 1902 the estimated yield per hour was only 4,000 gallons. In that year an air-lift was obtained and the yield increased to 7,000 gallons per hour.

This amount being inadequate for a constant supply, the Council's action was rendered necessary by the impossibility of further increasing the supply without going outside the district, and this course could only have been pursued at an unwarrantable expenditure. The Southend Water Company, on the other hand, have power of obtaining water over a large portion of South-East Essex. The Works were taken over on September 30th, 1907, since which date a constant supply has been given. New and enlarged mains are at present being laid, and additional wells are being sunk by the Company.

The Sewerage Works.

The policy of the Council in keeping all storm water possible from the foul water sewers has been maintained; separate surface water drains (or sewers) having been laid in all new streets into which storm water from the streets and front roofs discharges.

Only the storm water from the rear of buildings and sewage proper being allowed in the foul sewers. The liability to flooded sewers in the lower parts of the town has thus been lessened, and better facilities afforded for dealing with the sewage at the Works. There yet remains some storm water that gains access to the foul sewers which might be satisfactorily diverted.

During the year 1,600 lineal yards of main sewer have been laid along three of the main roads within the district in connection with this work. Particular care has been taken to eliminate all subsoil water, the pipes and joints being tested for water tightness.

Plans, sections, and provisional apportionments have been prepared under the Private Street Works Act, 1892, for seweraging eleven streets, comprising 4,000 lineal yards of

9 inches diameter sewers at an estimated cost of £3,000. This work has been approved by the Council, and subject to the Local Government Board's grant for loan will be carried out.

House Drainage.

Care is exercised in connection with this work. All pipes are laid in concrete and smoke tested before being covered up. Inspection manholes are provided with syphon traps before connecting to sewer, and fresh air inlet and outlets provided.

Sewage Works

Your Council have carried out during the past year—under revenue expenditure—the re-construction, renewal and cleansing of the No. 1 and 3 Contact Beds. The Beds were first filled in 1900, being laid down on the Sutton (or Dibdin) system without any provision for preliminary sedimentation in tanks. They have been in work for the past eight years, the liquid capacity becoming gradually reduced, to the extent of quarter the capacity now obtained after cleansing.

The materials comprising the beds (burnt ballast) have been taken out, weathered, screened, cleansed and replaced, together with new clinker ballast. The bottom of the beds has been concreted properly, under-drained with perforated channel pipes and a system of channels provided for surface distribution.

No 1 Bed came into operation on October 1st, 1907. Your Council propose completing this work, when it is anticipated that with the existing provisions for sedimentation, as described in last year's report, and consequent reduction in solid matter passed to the beds, with improved aeration and distribution, a better effluent will result, and all requirements be met for several years.

During the progress of the work some difficulty has naturally been experienced in maintaining first class results.

Highways.

The highways throughout the district are generally of

ordinary macadam, granite or ragstone surface, excepting the portion along the tram lines provided with granite setts. The main roads within the district maintained by the County Council, for the most part, are neither kerbed, channelled, nor flagged, the footpaths being chiefly gravelled.

In view of the increased building operations along the main County roads the question of kerbing, channelling and flagging (at least opposite the portions built upon) will become a sanitary necessity, especially in view of the fact that private owners are being compelled to make up the private streets in the district.

The Council have approved the erection of two public conveniences.

The maintenance, repair and cleansing of highways have received attention. It will no doubt soon become necessary to adopt some better material than ordinary dry macadam for use on highways fronting shop areas. For dust prevention watering has been carried out regularly, calcium chloride used as an experiment.

Buildings.

During the year the following notices have been dealt with :—

Drainage of New Buildings	71
Drainage of Old Buildings	2
Foundations ...	54
Commencement ...	49
Completion ...	69
Approval of Plans ...	68
Disapproval of Plans ...	14

Building Plans submitted :—

Dwelling Houses ...	98
Shops ...	9
Public Buildings ...	2
Alterations and Additions ...	6
Other Buildings ...	11

Total number of New Buildings approved 128

Dwelling Houses certified for Occupation 69

Total Sets of Plans submitted ... 68

A Special Committee has been appointed to revise the Building Byelaws, which are nearly completed. The Council has appointed Mr. A. Sidwell as Sanitary Inspector, Building Inspector and Works Foreman as a whole time official.

Generally the houses erected in the district have been of good class, mostly fitted with baths, with adequate water supply from the mains. A few houses have been erected with dry earth closets or cesspools in isolated areas, in which case a large area of ground has usually been attached.

Your Council are to be congratulated on the completion of the bridge over the railway line, giving access to the sea front.

Groynes have been placed on the foreshore to assist in the formation of the sandy beach.

Trees have been planted in several streets and additional work is contemplated.

Cart and store sheds have been erected on the Council's ground in Elm Road, and additions made to the Mortuary, including water supply.

I am indebted to Mr. Liversedge, the Council's Surveyor, for information on the water supply, sewerage system and highways works.

ESSEX COUNTY COUNCIL.

*Summary of work done through the Sanitary Inspector in
the Urban Sanitary District of Leigh-on-Sea during the
year ending December 31st, 1907.*

Complaints received	...	...	...	...	47
Nuisances detected without complaint	...	...	...	...	70
Nuisances abated	...	...	...	...	117
Notices served	...	...	...	...	13
Slaughter-houses inspected	...	...	...	...	8
Bakehouses inspected	...	...	...	...	8
Dairies and Milk Shops inspected	...	...	...	...	7
Cowsheds inspected	...	...	...	...	9
Workshops inspected	...	...	...	...	12

